



Atty. Docket: 11459/1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Applicant(s):** Eagle

**Serial No.:** 09/531,956

**Filing Date:** March 21, 2000

**Title:** METHOD AND SYSTEM FOR  
SCHEDULING TRAVEL ON A  
CHARTER TRANSPORT

**Examiner:** Morgan, Robert W.

**Art Unit:** 3626

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**DECLARATION OF BRYAN M. EAGLE, III UNDER 37 C.F.R. § 1.132**

Sir:

I, Bryan M. Eagle, III, make the following declaration in connection with the subject application.

I presently reside at 2250 Court Avenue, Memphis, TN 38104, and am the named inventor of the subject patent application.

It has been brought to my attention that U.S. Patent No. 6,711,548, issued to Rosenblatt on March 23, 2004, and entitled "Distributed Computer Network Air Travel Scheduling System and Method," has been cited against the subject application.

I have reviewed the Rosenblatt patent and find that it does not show or suggest my invention as it is not directed to private aircraft. Rather the entire patent is directed to charter services which involve the assignment of aircraft solely for the purpose of public use. Nevertheless, my invention occurred before the Rosenblatt filing date as shown by the following documentation and other evidence.

At least as early as September 14, 1999, I had the concept of my invention reduced to writing, copies of which I have attached hereto as Exhibits A and B. Exhibit

A is a technical document entitled "MyJet.com" (hereinafter "Technical Document") and relates to some of the technical details of how my system would work. This document was created on September 16, 1999, as indicated by the computer information on the last page of the document. Exhibit B is a Cyberjet overview (hereinafter "Cyberjet overview") that I created on September 14, 1999, as evidenced by the meta data for the document. Cyberjet was the predecessor to MyJet.com (Exhibit C) for which an executive summary was prepared on September 16, 1999. All of these documents were created long before the filing of the Rosenblatt patent application.

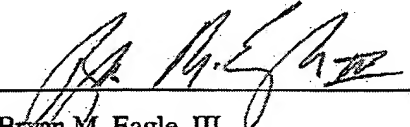
I have reviewed the claims and the following is my understanding as to the relevance of my earlier concept to the invention as claimed.

These documents show that my system relates to utilizing private aircraft for public travel in cooperation with a specifically designed communication network. *See* paragraph 1, Exhibit B. The owner of a private aircraft delivers information over a computer network to an internet site where the availability is recorded. *See* page 1 of Exhibit A and paragraph 2 of Exhibit B. This information can be made available to potential passengers. A plurality of passengers can communicate their reservation bids to the computer site indicating the desired destination for each and the payment offer. *See* page 2 of Exhibit A and paragraph 3 of Exhibit B. These are matched to determine whether or not it is worthwhile for the aircraft owner to fly to a destination, or fly to a destination at a particular time for the number of passengers and price for the passenger allotted. *See* pages 2 and 3 of Exhibit A and paragraph 3 of Exhibit B. *See also* Exhibit C.

If economically worthwhile the offers for reservations can be accepted for a date and a time or a range of times, communicated to the passengers and the open leg of a private jet or Air Taxi operator can be used by others for a common destination. *See* paragraph 3 of Exhibit B and pages 2 and 3 of Exhibit A. Rather than having private aircraft sitting empty at an airport, they can now be used to serve a public need in an economical manner.

I hereby declare that all statements made herein on my own knowledge are true and that all statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.

Date: 12/16/05

  
Bryan M. Eagle, III

# Exhibit A

# **MyJet.com**

## **Technical Requirements**

Version 1.1

December 13, 2005

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# 1 Introduction

This document outlines high-level technical requirements need to support the business model being proposed for MyJet.com. It is assumed that the reader is familiar with the business model and it is not discussed here.

## 2 Conceptual Model

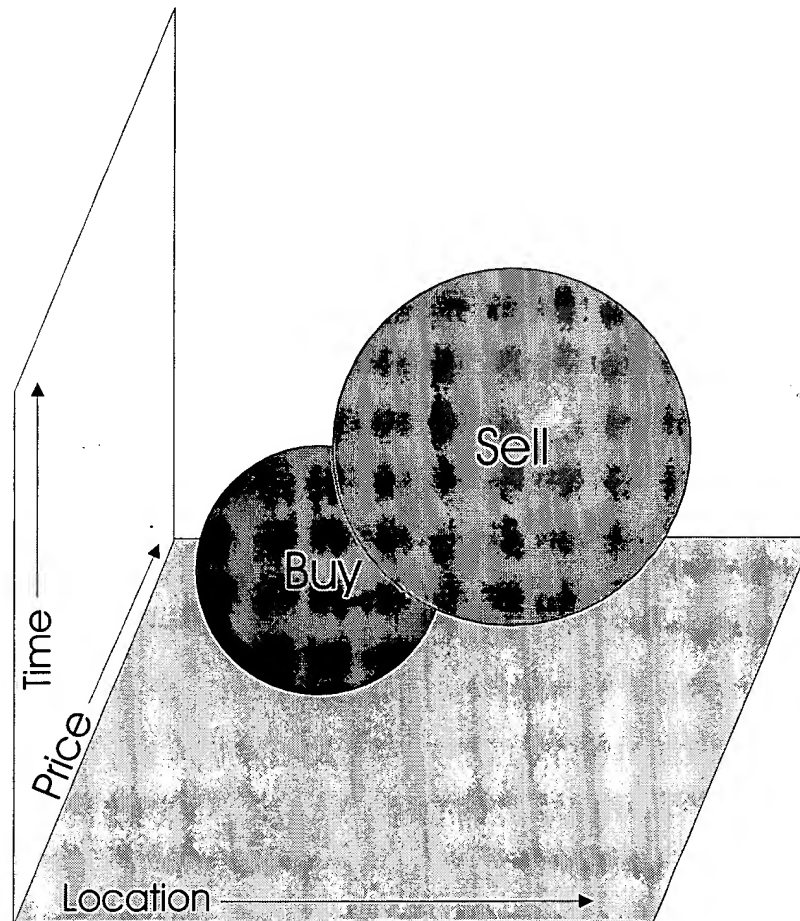
The main requirement is to optimally match would be purchasers of charter flights to available flights. There are four main variables in this matching:

1. The geographic location of the plane at any given point;
2. The time that a flight occurs;
3. The price paid for a flight;
4. The cost of a flight.

Each one of these variables is subject to variation for a given flight, although the business model may restrict the fluctuation. For example, one might establish a fixed price for all flights up to a certain mileage or certain operators may require that their planes leave for their home base within 48 hours of their arrival at a given destination. In addition, there will be economic limits there determine limit for each variable. For example, for any given flight there will be a minimum charge for a passenger needed to recover the cost of carrying that passenger.

Not all of these limits will be hard, and they may all be codependent. For example, a potential passenger may be willing to pay more for a flight from an airport that is 30 minutes from their house than one they have to drive to for an hour. However, the same passenger may be willing to drive the extra distance in order to leave 30 minutes earlier. Thus, it must be possible for a passenger to search for a flight from a given location at a given time and see in return results for inexact matches.

To determine how to make the matches consider first the problem of matching only the start or end-point of any given flight. In this case, the variables ranges can be represented as a n-space, with matches individual combinations represented as shapes within this n-space. For example, to match a simple combination of a flight occurring within some time period for some price we might have a representation as shown in the following figure:



**Figure 1 - Matching purchasers against sellers**

The ranges of each set of variables may not be symmetric and there may be more than three sets of variables (for example number of travelers may be yet another dimension). In any case each object has a continuous representation within each range and a function can be defined representing the possible range of possible values. This function will have a maximum at the most desirable point within each range. The intersection of the maxima for all variables gives the optimal combination for any one set of possible combinations. This intersection can be thought of as a "center" for each set. It is possible that there may be multiple maxima for a given set of combinations, but for the problem at hand such cases can be decomposed into multiple instances each having a single maxima. For example, someone willing to fly for one price in the morning and a different price in the afternoon can be treated as two separate purchasers. Thus, the process of matching seller and buyer is a case of finding the closest matches to the center for each set.

One could attempt to represent the entire problem set by combining the origination and destination into a single entity known as a route. In a market with a high number of buyers or sellers this will give satisfactory results. However, given that we are dealing with fairly scarce resources this may not provide enough matches. In particular, we will fail to find routes that could otherwise be successfully be broken into two or more pieces thus matching multiple requests. Thus, a given flight must be treated as a linked list representing all possible routes within a given geographic area and a given time

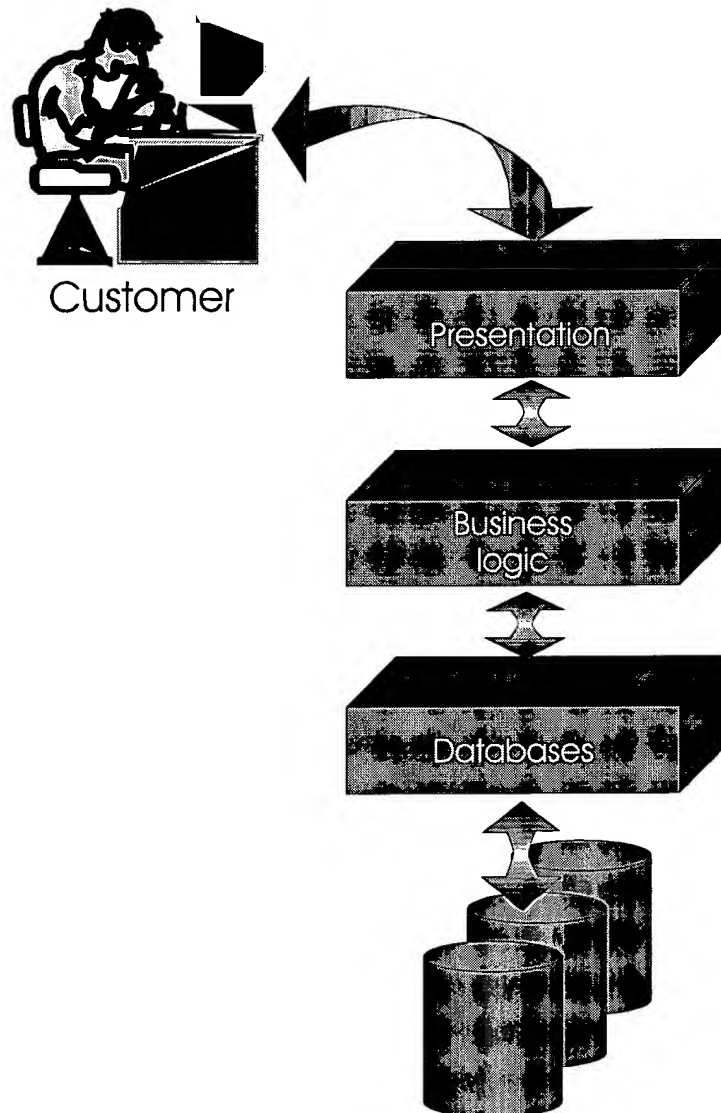


span. Matching then begins by matching flight origination together as a best match described above. If the destination falls within the range of possible destinations for the flight the possibility is retained for further investigation. If a set of exact origination and destination matches can be made then no further work is needed. If the destination is not the flights final destination then a new origination is created and can be used to possibly match other requested flights. Similarly, matches can be made against destination and used to generation possible originations. The process of generating and matching new originations and destinations is the classic “traveling salesman” problem which is known to be NP complete. This means that as the number of possible endpoints grows the number of possible solutions grows non-linearly and the best solution cannot necessarily be found within a given finite time frame.

There are several approaches for finding close approximate solutions to the traveling salesman problem. In particular, Monte Carlo and genetic algorithms may be applicable as well as applying neural networks. In the worst case, generating anything approaching near time matches to Web requests could require extensive hardware and still provide only affirmative matches for exact matches. As a result, it is highly recommended that the process of matching flights and requests be treated as an overnight process with e-mails be generated to the purchasers telling them of the results for a given request.

## 2.1 Web architectures

Collection and presentation of the data is to be through Web browsers, thus the de-facto standards of the Web determine the architecture of the system. Although there are no apparent needs for dynamic determination of the look and feel of the Web site best practices nonetheless suggest separating presentation logic from business logic. Thus, a multi-tiered system with browsers, application servers, and database servers is needed. This basic model is shown in the following diagram:



**Figure 2 - Standard Web architecture**

The main area of concern for the rest of this document will be how to design and implement the business logic and databases. The presentation logic implementation is presupposed by the fact that this is to be a Web based business. However, various alternatives for serving the Web content will also be discussed in the physical model.

### 3 Logical Model

In order to capture our main variables we have four main entities that we are concerned with:

1. Customers;
2. Carriers;
3. Routes
4. Accounts.

For the purposes of this design discussion there is no assumption that customers are automatically passengers. A customer may in fact wish to ship a package via a charter. Carriers may operate one or more forms of transportation. At this level of the model, we do not assume that such transportation is limited to jets; helicopters, yachts and even limousines might make up parts of the business. Routes will be determined by the capabilities of the forms of transportation in use. Accounts will track the costs and payments.

Some of the basic relationships and sub-entities of these entities are as follows:

- Customers book transportation;
- Carriers operate transportation;
- Transportation travels certain routes;
- Routes have costs associated with them;
- Transportation has operating costs associated with them;
- Customers book certain routes.
- Routes have an origination and a destination;
- Routes are traversed in a certain time period;
- Customers have arrival and departure times.

Based on the conceptual requirements we can see that there will be a combination of exact and fuzzy logic needed to match customers to route. Both models can be handled by a fuzzy logic mode since exact matches are coded as discrete values (instead of ranges) within such a model.

It is apparent from the discussion so far that one of the primary underlying requirements will be for some form of Geographical Information System (GIS). Such systems are typically capable of understanding the spatial relationship of various locations and of tracking the movement of entities across such locations. This database, will need to be easily extended to include the other data described here.

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## 4 Physical Model

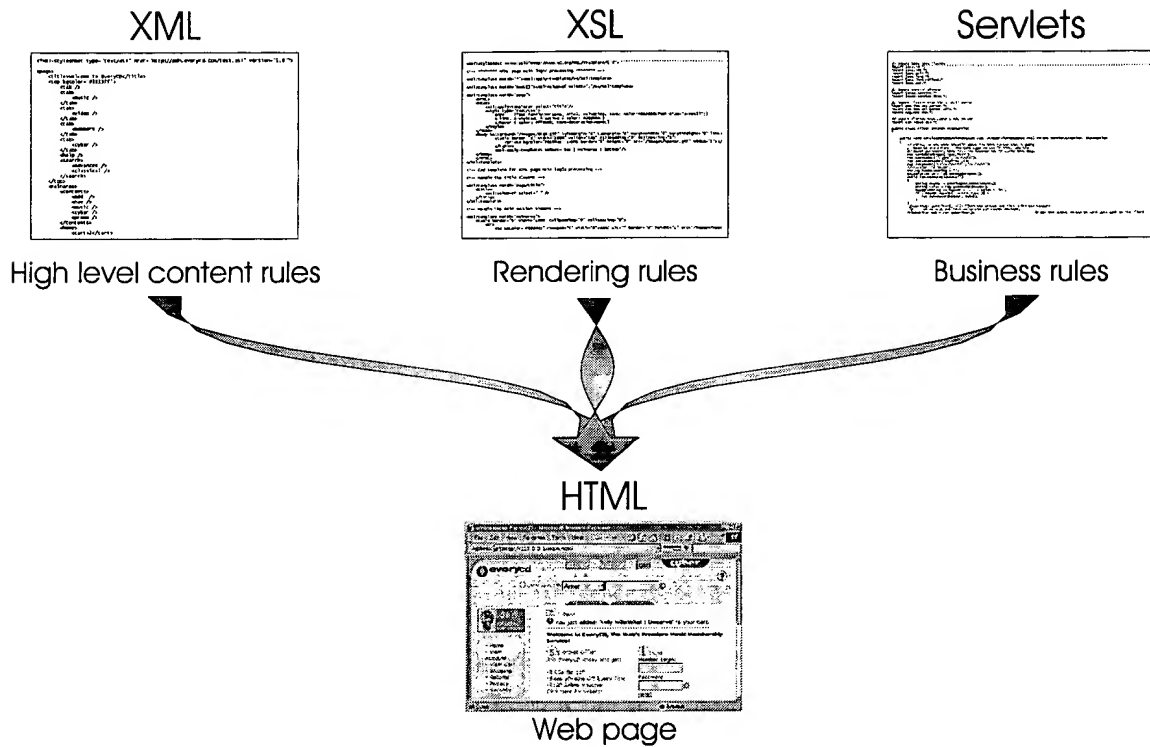


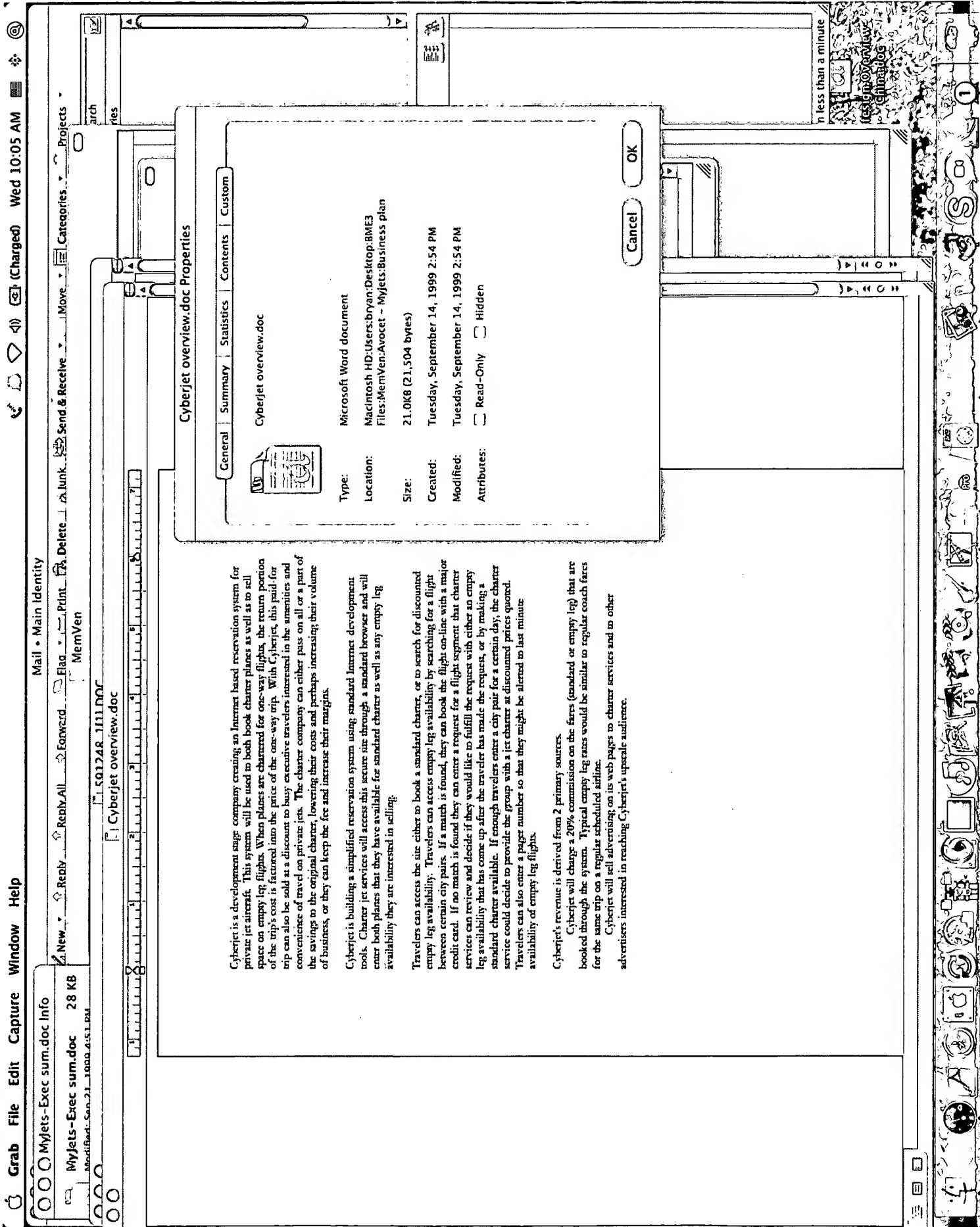
Figure 3 - Web page rendering

## 5 Summary

## Document information

**Author:** Peter Hunsberger  
**Created date:** 9/16/99 10:21 AM  
**File name:** D:\Work\Personal\clients\myjet\tech.doc  
**Last saved date:** 9/20/1999 4:05:00 PM  
**Size:** 212992 bytes  
**Pages:** 9

## Exhibit B



Cyberjet is a development stage company creating an Internet based reservation system for private jet aircraft. This system will be used to both book charter planes as well as to sell space on empty leg flights. When planes are chartered for one-way flights, the return portion of the trip's cost is factored into the price of the one-way trip. With Cyberjet, this paid-for trip can also be sold at a discount to busy executive travelers interested in the amenities and convenience of travel on private jets. The charter company can either pass on all or a part of the savings to the original charter, lowering their costs and perhaps increasing their volume of business, or they can keep the fee and increase their margins.

Cyberjet is building a simplified reservation system using standard Internet development tools. Charter jet services will access this secure site through a standard browser and will enter both planes that they have available for standard charter as well as any empty leg availability they are interested in selling.

Travelers can access the site either to book a standard charter, or to search for discounted empty leg availability. Travelers can access empty leg availability by searching for a flight between certain city pairs. If a match is found, they can book the flight on-line with a major credit card. If no match is found they can enter a request for a flight segment that charter services can review and decide if they would like to fulfill the request with either an empty leg availability that has come up after the traveler has made the request, or by making a standard charter available. If enough travelers enter a city pair for a certain day, the charter service could decide to provide the group with a jet charter at discounted prices quoted. Travelers can also enter a pager number so that they might be alerted to last minute availability of empty leg flights.

Cyberjet's revenue is derived from 2 primary sources.

Cyberjet will charge a 20% commission on the fares (standard or empty leg) that are booked through the system. Typical empty leg rates would be similar to regular coach fares for the same trip on a regular scheduled airline.

Cyberjet will sell advertising on its web pages to charter services and to other advertisers interested in reaching Cyberjet's upscale audience.



## Exhibit C

MyJets-Exec sum.doc Info

MyJets-Exec sum.doc 28 KB

Modified: Sep 21, 1999 4:51 PM

Mail • Main Identity


File Edit Print Forward Reply All Reply New

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# MyJets.com

## Executive Summary

Confidential and Proprietary  
Section Break (Next Page)

### Executive Summary

MyJets.com is an Internet reservation system that allows charter jet operators to fill empty legs of charter flights by selling seats on these legs directly to consumers. Consumers can log onto the site, see the availability of seats on these jets and purchase a seat. MyJets.com handles the settlement charges and takes a 20% fee for its services.

There are approximately 4,000 private jet aircraft in service today. Each year these planes fly an average of 260 flights. These planes are owned primarily by the 800 "Part 135" charter operators and are chartered by consumers on a per flight-hour basis. Charges vary between a low of \$1,200 an hour of flight time for a small Lear jet with a capacity of 5 to as much as

will run in 1 minute

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Signing Doc

# ***MyJets.com***

## **Executive Summary**

Confidential and Proprietary

## **Executive Summary**

MyJets.com is an Internet reservation system that allows charter jet operators to fill empty legs of charter flights by selling seats on these legs directly to consumers. Consumers can log onto the site, see the availability of seats on these jets and purchase a seat. MyJets.com handles the settlement charges and takes a 20% fee for its services.

There are approximately 4,400 private jet aircraft in service today. Each year these planes fly an average of 260 flights. These planes are owned primarily by the 800 "Part 135" charter operators and are chartered by consumers on a per flight-hour basis. Charges vary between a low of \$1,200 an hour of flight time for a small Lear jet with a capacity of 5 to as much as \$8,000 per hour or more for a larger Challenger with room for at least 10.

When a person charts the plane for a trip from New York to Chicago for an overnight trip the plane typically stays at the airport and waits for that person. Charges for the overnight stay for the pilots is added. If the person is staying many days or only needs the jet one way, the plane will immediately return to its home base. This "empty leg" or "deadhead" trip will be included in the rate for a one way rental. It is estimated that there are over 114,000 deadhead flights a year.

Typically a charter operator will try to fill this leg if he can by calling charter operators in the area that the plane is returning from and see if they have a need for a one-way charter. A small percentage of the time they can fill this leg. Since this leg has already been paid for, the charter operator can either keep whatever fee is paid for the empty leg charter, or split this fee with the person who booked the one-way flight. Ultimately, by being able to fill the seats on a plane as opposed to simply chartering the plane, this will reduce the cost of chartering and increase demand for private jet travel. Myjets.com has the potential to drastically increase the utilization of charter jets in the US and overseas.

With Myjets.com, operators can now hold their empty leg availability out to a much broader audience and increase their chances of filling these empty legs. The major assumption is that there is a large audience of executive travelers that would love the opportunity to fly in a private jet over the standard commercial flight. Typically, these travelers are flying on full fare, refundable tickets and are making adjustments to their schedules at the last minute. With MyJets.com, travelers can check availability of flights through the Internet and book a seat on a flight. Booking a ticket will require entering all necessary information (full name, address, telephone number, and credit card information) and agreeing to the provisions of the trips. These provisions will include arrival requirements, the fact that the tickets are non refundable and insurance and liability waiver provisions.

Once they book the seat, they will be given all necessary information required by the FAA, such as tail number, certificate information, etc. as well instructions on where and when to meet their flight. They will also be given a number to call if they are running late. Once they arrive at the terminal, they will only have to present identification. All tickets will be

electronic. As with all charter flights, the plane crew will be responsible for assuring the correct identification is presented and that people are briefed on the safety issues for that aircraft. For each flight there will be an estimated departure time, typically a one hour window. As soon as all travelers arrive, the plane will depart. Unlike commercial flights, the plane has some flexibility as to when to leave and can wait for passengers if they are running late, or can leave early if all the passengers have arrived.

MyJets.com has reserved the Internet domain name myjets.com and is pursuing the purchase of the domain names webjet.com and myjet.com.

MyJets is currently seeking a seed stage investment of \$1.5 million dollars. This financing will be used to develop the database engine and web site for the MyJets reservation system as well as for personnel and working capital. Additional investments will be required in May of 2000 and February of 2001 of \$5 million each to reach breakeven.